

# Permit to Operate

**FACILITY:** S-1119

**EXPIRATION DATE:** 02/28/200

**LEGAL OWNER OR OPERATOR:** DOUBLE C LIMITED

**MAILING ADDRESS:** 34759 LENCIONI AVE, SUITE A  
BAKERSFIELD, CA 93308

**FACILITY LOCATION:** HEAVY OIL CENTRAL  
KERN FRONT, CA

**FACILITY DESCRIPTION:** OIL AND NATURAL GAS PRODUCTION

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

**DAVID L. CROW**

Executive Director / APCO

**Seyed Sadredin**

Director of Permit Services

**Initial TV Permit**  
**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-1119-0-1

**EXPIRATION DATE:** 02/28/2003

**EQUIPMENT DESCRIPTION:**

## **PERMIT UNIT REQUIREMENTS**

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1 and Kern County Rule 111], [Federally Enforceable Through Title V]
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Kern County Rule 111], [Federally Enforceable Through Title V]
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0]
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; 2020; and Kern County Rule 201], [Federally Enforceable Through Title V]
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1]
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031]
7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040]
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1]
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2]
10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1]
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520(6/15/95) [District Rules 2520, 9.6.2 and 1100, 7.0]
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.8]
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.2]

## Initial TV Permit

14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3]
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4]
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5]
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10]
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1]
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2]
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3]
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4]
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and Kern County Rule 401], [Federally Enforceable Through Title V]
23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1]
24. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1 (12/17/92)), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 of Rule 4601 (12/17/92). [District Rule 4601, 5.2]
25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4]
26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5]
27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2 (12/17/92). [District Rule 4601, 6.1 and 6.2]
28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0]
29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F]
30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B]
31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 (4/25/96) unless specifically exempted under section 4 of Rule 8020 (4/25/96). [District Rule 8020]
32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030 (4/25/96), unless specifically exempted under section 4 of Rule 8030 (4/25/96). [District Rule 8030]

## Initial TV Permit

33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 (4/25/96) unless specifically exempted under section 4 of Rule 8060 (4/25/96). [District Rule 8060]
34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M]
35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17]
36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2]
37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1]
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Kern County Rule 401, Kern County Rule 111, Kern County Rules 201, 202, 203, 204, 208, and 209, Kern County Rule 410.1, and Kern County Rule 423. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (12/17/92); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2]
40. The facility shall comply with all applicable requirements regarding preparation and implementation of a Risk Management Plan and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR Part 68], [Federally Enforceable Through Title V]
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-1119-1-6

**EXPIRATION DATE:** 02/28/2003

**EQUIPMENT DESCRIPTION:**

A NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE COGENERATION SYSTEM WITH STEAM INJECTION.

## **PERMIT UNIT REQUIREMENTS**

1. For control of the gas turbine exhaust, the gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) control systems utilizing ammonia as reducing agent for NOx controls. [District NSR Rule; District Rule 4703, 5.1], [Federally Enforceable Through Title V]
2. Gas-fired turbine shall be equipped with carbon monoxide (CO) reactor of sufficient catalyst volume to meet CO and VOC emissions limits. [District NSR Rule; District Rule 4703, 5.2], [Federally Enforceable Through Title V]
3. Gas turbine engine steam injection rate shall be maintained at a steam to fuel ratio expected to result in compliance with all emissions limits, except during periods of startup and shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
4. Gas turbine combustor steam injection system shall be equipped with continuously recording steam and injection rate monitoring system, accurate to within  $\pm 5\%$  allowing calculation of water/steam to fuel injection ratio. [District NSR Rule; District Rule 4703; 40 CFR 60.334(a)], [Federally Enforceable Through Title V]
5. Gas turbine engine shall be fired exclusively with PUC regulated natural gas, with fuel gas sulfur content not to exceed 0.017%. Compliance shall be demonstrated by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. [40 CFR 60.333(a) & (b); CFR 60.332(a); Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
6. The facility shall comply with all applicable requirements for compliance assurance monitoring in 40 CFR Part 64. [40 CFR Part 64], [Federally Enforceable Through Title V]
7. All CEM data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.14(h)], [Federally Enforceable Through Title V]
8. CEM data can be used in addition to stack testing to determine compliance with NOx and CO concentrations and daily emission limits. [District NSR Rule], [Federally Enforceable Through Title V]
9. Startup and shutdown of the gas turbine, as defined in this permit, in 40 CFR Subpart A 60.2, and in Rule 4703 shall not exceed a time period of two hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed 9.0 ppmv for NOx and 200 ppmv for CO except during shutdown. [District Rule 4703]
10. The operator shall maintain on file copies of all natural gas fuel invoices, natural gas bills, gas purchase contracts, supplier certifications, and test results used to determine compliance with the requirements of this permit unit. [District NSR Rule and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
11. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of three hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit except during shutdown. [40 CFR Subpart A 60.2], [Federally Enforceable Through Title V]
12. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)], [Federally Enforceable Through Title V]
13. All gas turbine exhaust shall flow through both catalyst beds. [District NSR Rule], [Federally Enforceable Through Title V]
14. VOC emissions, including emissions from lube oil cooler and collected liquids, shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District NSR Rule], [Federally Enforceable Through Title V]
15. Emission rate from the gas turbine exhaust shall not exceed the following: PM10: 74.88 lb/day and 3.12 lb/hr, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 3.84 lb/day, and CO: 669.19 lb/day. [District NSR Rule; District Rule 4201; District Rule 4703, 5.1 & 5.2; 40 CFR Part 60.332(a) and 333(b)], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Operators of CEMs shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventative measures adapted; averaging period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 2520, 9.6.1; District Rule 1080, 8.0; Kern County Rule 108; CFR 60.7(c)], [Federally Enforceable Through Title V]
17. Steam produced at this facility for use in oil production operations shall only affect wells connected to well vent vapor recovery systems S-1326-28 (Oxy USA) and S-1342-7 (Stockdale Oil & Gas). [District NSR Rule], [Federally Enforceable Through Title V]
18. All permits issued to facilities S-172, S-1118, S-1119, S-1120 and S-2049 are included in Dynegy's heavy oil central stationary source. [District NSR Rule], [Federally Enforceable Through Title V]
19. The emission concentration of nitrogen oxides (as NO<sub>2</sub>) at the turbine exhaust stack shall not exceed 4.5 ppmv dry calculated to 15% O<sub>2</sub>, except during periods of startup and shutdown. [District NSR Rule, District Rule 4703, and 40 CFR 60.332(a)], [Federally Enforceable Through Title V]
20. Maximum emissions concentration of carbon monoxide (CO) shall not exceed 51 ppmv dry calculated to 15% O<sub>2</sub>, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703], [Federally Enforceable Through Title V]
21. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
22. Circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 1081; District Rule 4703; Kern County Rule 108; 40 CFR Part 60], [Federally Enforceable Through Title V]
23. The District must be notified 30 days prior to any compliance source testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081, 7.0; District Rule 4703, 6.3], [Federally Enforceable Through Title V]
24. Nitrogen oxides (NO<sub>x</sub>) concentrations from the gas turbine exhaust shall be determined using EPA Method 7E or 20, and oxygen (O<sub>2</sub>) concentrations shall be determined using EPA Method 3, 3A, or 20. Carbon monoxide (CO) emissions shall be determined using EPA Test Methods 10 or 10B. Source test results will be provided to the District annually. EPA approved alternative test methods may also be used to address the source testing requirements of this permit. [District Rule 1081; District Rule 2520, 9.4 and 9.5; District Rule 4703, 5.1 & 6.4; and 40 CFR 60.335(b),(c)], [Federally Enforceable Through Title V]
25. Unfired heat recovery steam generator turbine exhaust for unit shall be equipped with continuously recording emissions monitors for NO<sub>x</sub>, CO, and O<sub>2</sub>. The continuous emission monitors shall be calibrated and operated according to U.S. EPA guidelines as specified in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District NSR Rule; District Rule 1080; District Rule 4703; 40 CFR Part 60; Kern County Rule 108], [Federally Enforceable Through Title V]
26. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080; 40 CFR Part 60], [Federally Enforceable Through Title V]
27. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [Kern County Rule 108; District Rule 1080, 7.2], [Federally Enforceable Through Title V]
28. Except for NO<sub>x</sub> and CO emission data obtained for compliance demonstration purposes, CEM data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NO<sub>x</sub> and CO shall be averaged over a three hour period. [District Rule 4703, 5.0]
29. Records shall be maintained and shall contain: the occurrence and duration of any startup, shutdown, or malfunction; performance testing; evaluations; calibrations; checks; adjustments; any period during which a continuous monitoring system or monitoring device was inoperative; maintenance of any CEM that have been installed pursuant to District Rule 1080; emission measurements; daily actual local startup and stop time; length and reason for reduced load periods; total hours of operation; and quantity of fuel used. [40 CFR 60.332(a), (b); 40 CFR 60.7(b); District Rule 4703; Rule 1080, 7.3; Kern County Rule 108], [Federally Enforceable Through Title V]
30. Gas turbine engine shall not be operated unless steam injection system, selective catalyst reduction system, and oxidation catalyst system are operating, except during periods of startup or shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
31. Gas turbine engine shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule], [Federally Enforceable Through Title V]
32. Permittee shall maintain records of daily NO<sub>x</sub> and CO emissions from CEM data, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]

## Initial TV Permit

33. The operator shall notify the APCO of a violation of any emission standard indicated by the CEM within 96 hours of occurrence. The APCO shall be notified within 8 hours after a detection of a breakdown in monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment. [District Rule 1080, 9.0 and 10.0, District Rule 2520, 9.6.2; Kern County Rule 108; 40 CFR 60.334(c)], [Federally Enforceable Through Title V]
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, and 10.0 (Amended December 17, 1992); 1081 (Amended December 16, 1993); 4201 (Amended December 17, 1992); 4703 sections 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.4, 6.3, and 6.4 (Amended October 16, 1997); 4801 (Amended December 17, 1992); 40 CFR 60.332(a),(b); 60.333(a),(b),(c); 60.334(a),(c); and 60.335(b),(c); and 40 CFR 64. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
35. Facility shall keep an accurate record of the location and name of the owner or operator of each oil production operation using steam from this facility and shall make those records available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
36. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District NSR Rule], [Federally Enforceable Through Title V]
37. Liquids collected from lube oil vent system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District NSR Rule], [Federally Enforceable Through Title V]
38. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
39. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
40. Compliance with the ammonia slip (ppmv) emission limit shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days of annual permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collected shall be submitted to the District within 60 days of testing. [District Rule 4102]
41. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District NSR Rule], [Federally Enforceable Through Title V]
42. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrated compliance with VOC hourly emissions limit. Official test results and field data collected shall be submitted within 60 days of testing. [District NSR Rule], [Federally Enforceable Through Title V]
43. Source testing for NOx concentration, CO concentration, and VOC (hourly) shall be conducted annually using the methods and procedures approved by the District and shall be conducted under conditions representative to normal operation. [District NSR Rule; District Rule 1081, 5.1 & 6.3; CFR 60.332(a)&(b)], [Federally Enforceable Through Title V]
44. On days of gas turbine engine startup/shutdown, Permittee shall demonstrate compliance with NOx and carbon monoxide daily emissions limits by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]
45. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is performed in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with the quarterly compliance reports to the District. [District NSR Rule], [Federally Enforceable Through Title V]
46. Permittee shall make continuous emissions monitoring printouts available for District inspection and shall otherwise meet recordkeeping and quarterly reporting requirements of Rule 1080. [District Rule 1080], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-1119-2-6

**EXPIRATION DATE:** 02/28/2003

**EQUIPMENT DESCRIPTION:**

A NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE  
COGENERATION SYSTEM WITH STEAM INJECTION.

## **PERMIT UNIT REQUIREMENTS**

1. For control of the gas turbine exhaust, the gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) control systems utilizing ammonia as reducing agent for NOx controls. [District NSR Rule; District Rule 4703, 5.1], [Federally Enforceable Through Title V]
2. Gas-fired turbine shall be equipped with carbon monoxide (CO) reactor of sufficient catalyst volume to meet CO and VOC emissions limits. [District NSR Rule; District Rule 4703, 5.2], [Federally Enforceable Through Title V]
3. Gas turbine engine steam injection rate shall be maintained at a steam to fuel ratio expected to result in compliance with all emissions limits, except during periods of startup and shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
4. Gas turbine combustor steam injection system shall be equipped with continuously recording steam and injection rate monitoring system, accurate to within  $\pm 5\%$  allowing calculation of water/steam to fuel injection ratio. [District NSR Rule; District Rule 4703; 40 CFR 60.334(a)], [Federally Enforceable Through Title V]
5. Gas turbine engine shall be fired exclusively with PUC regulated natural gas, with fuel gas sulfur content not to exceed 0.017%. Compliance shall be demonstrated by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. [40 CFR 60.333(a) & (b); CFR 60.332(a); Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
6. The facility shall comply with all applicable requirements for compliance assurance monitoring in 40 CFR Part 64. [40 CFR Part 64], [Federally Enforceable Through Title V]
7. All CEM data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.14(h)], [Federally Enforceable Through Title V]
8. CEM data can be used in addition to stack testing to determine compliance with NOx and CO concentrations and daily emission limits. [District NSR Rule], [Federally Enforceable Through Title V]
9. Startup and shutdown of the gas turbine, as defined in this permit, in 40 CFR Subpart A 60.2, and in Rule 4703 shall not exceed a time period of two hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed 9.0 ppmv for NOx and 200 ppmv for CO except during shutdown. [District Rule 4703]
10. The operator shall maintain on file copies of all natural gas fuel invoices, natural gas bills, gas purchase contracts, supplier certifications, and test results used to determine compliance with the requirements of this permit unit. [District NSR Rule and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
11. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of three hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit except during shutdown. [40 CFR Subpart A 60.2], [Federally Enforceable Through Title V]
12. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)], [Federally Enforceable Through Title V]
13. All gas turbine exhaust shall flow through both catalyst beds. [District NSR Rule], [Federally Enforceable Through Title V]
14. VOC emissions, including emissions from lube oil cooler and collected liquids, shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District NSR Rule], [Federally Enforceable Through Title V]
15. Emission rate from the gas turbine exhaust shall not exceed the following: PM10: 74.88 lb/day and 3.12 lb/hr, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 3.84 lb/day, and CO: 669.19 lb/day. [District NSR Rule; District Rule 4201; District Rule 4703, 5.1 & 5.2; 40 CFR Part 60.332(a) and 333(b)], [Federally Enforceable Through Title V]



## Initial TV Permit

16. Operators of CEMs shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventative measures adapted; averaging period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 2520, 9.6.1; District Rule 1080, 8.0; Kern County Rule 108; CFR 60.7(c)], [Federally Enforceable Through Title V]
17. Steam produced at this facility for use in oil production operations shall only affect wells connected to well vent vapor recovery systems S-1326-28 (Oxy USA) and S-1342-7 (Stockdale Oil & Gas). [District NSR Rule], [Federally Enforceable Through Title V]
18. All permits issued to facilities S-172, S-1118, S-1119, S-1120 and S-2049 are included in Dynegy Power Corp.'s heavy oil central stationary source. [District NSR Rule], [Federally Enforceable Through Title V]
19. The emission concentration of nitrogen oxides (as NO<sub>2</sub>) at the turbine exhaust stack shall not exceed 4.5 ppmv dry calculated to 15% O<sub>2</sub>, except during periods of startup and shutdown. [District NSR Rule, District Rule 4703, and 40 CFR 60.332(a)], [Federally Enforceable Through Title V]
20. Maximum emissions concentration of carbon monoxide (CO) shall not exceed 51 ppmv dry calculated to 15% O<sub>2</sub>, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703], [Federally Enforceable Through Title V]
21. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
22. Circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 1081; District Rule 4703; Kern County Rule 108; 40 CFR Part 60], [Federally Enforceable Through Title V]
23. The District must be notified 30 days prior to any compliance source testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081, 7.0; District Rule 4703, 6.3], [Federally Enforceable Through Title V]
24. Nitrogen oxides (NO<sub>x</sub>) concentrations from the gas turbine exhaust shall be determined using EPA Method 7E or 20, and oxygen (O<sub>2</sub>) concentrations shall be determined using EPA Method 3, 3A, or 20. Carbon monoxide (CO) emissions shall be determined using EPA Test Methods 10 or 10B. Source test results will be provided to the District annually. EPA approved alternative test methods may also be used to address the source testing requirements of this permit. [District Rule 1081; District Rule 2520, 9.4 and 9.5; District Rule 4703, 5.1 & 6.4; and 40 CFR 60.335(b),(c)], [Federally Enforceable Through Title V]
25. Unfired heat recovery steam generator turbine exhaust for unit shall be equipped with continuously recording emissions monitors for NO<sub>x</sub>, CO, and O<sub>2</sub>. The continuous emission monitors shall be calibrated and operated according to U.S. EPA guidelines as specified in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District NSR Rule; District Rule 1080; District Rule 4703; 40 CFR Part 60; Kern County Rule 108], [Federally Enforceable Through Title V]
26. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080; 40 CFR Part 60], [Federally Enforceable Through Title V]
27. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [Kern County Rule 108; District Rule 1080, 7.2], [Federally Enforceable Through Title V]
28. Except for NO<sub>x</sub> and CO emission data obtained for compliance demonstration purposes, CEM data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NO<sub>x</sub> and CO shall be averaged over a three hour period. [District Rule 4703, 5.0]
29. Records shall be maintained and shall contain: the occurrence and duration of any startup, shutdown, or malfunction; performance testing; evaluations; calibrations; checks; adjustments; any period during which a continuous monitoring system or monitoring device was inoperative; maintenance of any CEM that have been installed pursuant to District Rule 1080; emission measurements; daily actual local startup and stop time; length and reason for reduced load periods; total hours of operation; and quantity of fuel used. [40 CFR 60.332(a), (b); 40 CFR 60.7(b); District Rule 4703; Rule 1080, 7.3; Kern County Rule 108], [Federally Enforceable Through Title V]
30. Gas turbine engine shall not be operated unless steam injection system, selective catalyst reduction system, and oxidation catalyst system are operating, except during periods of startup or shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
31. Gas turbine engine shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule], [Federally Enforceable Through Title V]
32. Permittee shall maintain records of daily NO<sub>x</sub> and CO emissions from CEM data, and such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]

## Initial TV Permit

33. The operator shall notify the APCO of a violation of any emission standard indicated by the CEM within 96 hours of occurrence. The APCO shall be notified within 8 hours after a detection of a breakdown in monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment. [District Rule 1080, 9.0 and 10.0, District Rule 2520, 9.6.2; Kern County Rule 108; 40 CFR 60.334(c)], [Federally Enforceable Through Title V]
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, and 10.0 (Amended December 17, 1992); 1081 (Amended December 16, 1993); 4201 (Amended December 17, 1992); 4703 sections 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.4, 6.3, and 6.4 (Amended October 16, 1997); 4801 (Amended December 17, 1992); 40 CFR 60.332(a),(b); 60.333(a),(b),(c); 60.334(a),(c); and 60.335(b),(c); and 40 CFR 64. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
35. Facility shall keep an accurate record of the location and name of the owner or operator of each oil production operation using steam from this facility and shall make those records available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
36. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District NSR Rule], [Federally Enforceable Through Title V]
37. Liquids collected from lube oil vent system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District NSR Rule], [Federally Enforceable Through Title V]
38. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
39. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined in this permit. [District NSR Rule], [Federally Enforceable Through Title V]
40. Compliance with the ammonia slip (ppmv) emission limit shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days of annual permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collected shall be submitted to the District within 60 days of testing. [District Rule 4102]
41. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District NSR Rule], [Federally Enforceable Through Title V]
42. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrated compliance with VOC hourly emissions limit. Official test results and field data collected shall be submitted within 60 days of testing. [District NSR Rule], [Federally Enforceable Through Title V]
43. Source testing for NOx concentration, CO concentration, and VOC (hourly) shall be conducted annually using the methods and procedures approved by the District and shall be conducted under conditions representative to normal operation. [District NSR Rule; District Rule 1081, 5.1 & 6.3; CFR 60.332(a)&(b)], [Federally Enforceable Through Title V]
44. On days of gas turbine engine startup/shutdown, Permittee shall demonstrate compliance with NOx and carbon monoxide daily emissions limits by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]
45. Audits of monitors shall be conducted quarterly, except during quarters in which RATA is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with the quarterly compliance reports to the District. [District NSR Rule], [Federally Enforceable Through Title V]
46. Permittee shall make continuous emissions monitoring printouts available for District inspection and shall otherwise meet recordkeeping and quarterly reporting requirements of Rule 1080. [District Rule 1080], [Federally Enforceable Through Title V]

## Initial TV Permit